Please amend the application as follows and to comply with requirements for patent applications containing nucleotide sequence and/or amino acid sequence disclosures in adherence with rules 37 C.F.R. § 1.821-1.825:

IN THE SPECIFICATION

Please replace the paragraph beginning at page 6, line 21, with the following rewritten paragraph:

A1

– Figure 2 (SEQ ID NO:1) shows an embodiment of a nucleic acid (mRNA) which includes a sequence encoding an angiogenesis protein, AAA4. The start and stop codons are underlined. –

Please replace the paragraph beginning at page 6, line 23, with the following rewritten paragraph:

A2

– Figure 3 (SEQ ID NO:2) shows the open reading frame of a nucleic acid sequence encoding AAA4. The start and stop codons are underlined. –

Please replace the paragraph beginning at page 6, line 25, with the following rewritten paragraph:

A3

– Figure 4 (SEQ ID NO:3) shows an embodiment of the amino acid sequence of AAA4. The signal peptide is double underlined, and the transmembrane sequence is underlined. In one embodiment herein, AAA4 is soluble. Thus, the signal peptide can be omitted, and the transmembrane domain deleted, inactivated, or truncated. –

Please replace the paragraph beginning at page 7, line 1, with the following rewritten paragraph:

a4 – Figure 5 shows peptides AAA4p1 (SEQ ID NO:4) and AAA4p2 (SEQ ID NO:5). –

Please replace the paragraph beginning at page 7, line 4, with the following rewritten paragraph:

a5 – Figure 7 (SEQ ID NO:6) shows an embodiment of a nucleic acid sequence encoding an angiogenesis protein, AAA1. A putative stop codon is underlined. –

Please replace the paragraph beginning at page 7, line 6, with the following rewritten paragraph:

a6 – Figure 8 (SEQ ID NO:7) shows an embodiment of an amino acid sequence for AAA1. A transmembrane domain is underlined. In one embodiment, AAA1 is soluble. In preferred embodiments, the transmembrane domain is deleted or inactivated, or AAA1 is truncated to delete the transmembrane domain. –

Please replace the paragraph beginning at page 7, line 10, with the following rewritten paragraph:

a7 – Figure 9 shows AAA1p1 (SEQ ID NO:8) and AAA1p2 (SEQ ID NO:9). –

Please replace the paragraph beginning at page 7, line 13, with the following rewritten paragraph:

a8 – Figure 11 (SEQ ID NO:10) shows an embodiment of a nucleic acid, mRNA, which comprises a sequence encoding an angiogenesis protein, Edg-1. The start and stop codons are underlined. –

Please replace the paragraph beginning at page 7, line 15, with the following rewritten paragraph:

a9 – Figure 12 (SEQ ID NO:11) shows the open reading frame encoding Edg-1, wherein the start and stop codons are underlined. –

Please replace the paragraph beginning at page 7, line 18, with the following rewritten paragraph:

Q10

– Figure 13 (SEQ ID NO:12) shows an embodiment of an amino acid sequence for an angiogenesis protein, Edg-1, wherein the transmembrane domains are underlined. In a preferred embodiment herein, a soluble form of Edg-1 is provided. In one embodiment, the transmembrane domains are deleted, inactivated, and/or the protein is truncated so as to exclude the domains (with or without re-ligation of remaining soluble regions). –

Please replace the paragraph beginning at page 7, line 23, with the following rewritten paragraph:

Q11

– Figure 14 (SEQ ID NOS:13-16) depicts four peptide sequences provided herein and their respective solubilities. –

Please replace the paragraph beginning at page 8, line 3, with the following rewritten paragraph:

Q12

– Figure 17 (SEQ ID NO:17) shows an embodiment of a nucleic acid sequence which includes the coding sequence for a tissue remodeling protein, alpha 5 beta 1 integrin (sometimes referred to as VLA-5), wherein the start and stop codon are underlined. –

Please replace the paragraph beginning at page 8, line 6, with the following rewritten paragraph:

Q13

– Figure 18 (SEQ ID NO:18) shows an embodiment of an amino acid sequence of a tissue remodeling protein, alpha 5 beta 1 integrin, wherein a transmembrane domain is underlined. –

Please replace the paragraph beginning at page 8, line 15, with the following rewritten paragraph:

Q14

– Figure 21 (SEQ ID NO:19) shows an embodiment of a nucleic acid sequence which includes the coding sequence for an angiogenesis protein, endomucin, wherein the start and stop codon are boxed. –

Please replace the paragraph beginning at page 8, line 17, with the following rewritten paragraph:

Q15

– Figure 22 (SEQ ID NO:20) shows an embodiment of an amino acid sequence of an angiogenesis protein, endomucin, wherein a signal sequence is bolded and a transmembrane domain is underlined. –

Please replace the paragraph beginning at page 8, line 19, with the following rewritten paragraph:

Q16

– Figure 23 (SEQ ID NO:21) shows an embodiment of a nucleic acid sequence which includes the coding sequence for an angiogenesis protein, matrix metalloproteinase 10 (also called stromolysin 2), wherein the start and stop codon are boxed. –

Please replace the paragraph beginning at page 16, line 20, with the following rewritten paragraph:

Q17

– The extracellular domains of transmembrane proteins are diverse; however, conserved motifs are found repeatedly among various extracellular domains. Conserved structure and/or functions have been ascribed to different extracellular motifs. For example, cytokine receptors are characterized by a cluster of cysteines and a WSXWS (W= tryptophan, S= serine, X=any amino acid) motif (SEQ ID NO:22). Immunoglobulin-like domains are highly conserved. Mucin-like domains may be involved in cell adhesion and leucine-rich repeats participate in protein-protein interactions. –

Please replace the paragraph beginning at page 32, line 16, with the following rewritten paragraph:

– In a preferred embodiment, when the angiogenesis protein is to be used to generate antibodies, for example for immunotherapy, the angiogenesis protein should share at least one epitope or determinant with the full length protein. By "epitope" or "determinant" herein is meant a portion of a protein which will generate and/or bind an antibody or T-cell receptor in the context of MHC. Thus, in most instances, antibodies made to a smaller angiogenesis protein will be able to bind to the full length protein. In a preferred embodiment, the epitope is unique; that is, antibodies generated to a unique epitope show little or no cross-reactivity. In a preferred embodiment, the epitope is selected from AAA4p1 (SEQ ID NO:4) and AAA4p2 (SEQ ID NO:5). In another preferred embodiment the epitope is selected from AAA1p1 (SEQ ID NO:8) and AAA1p2 (SEQ ID NO:9). In another preferred embodiment the epitope is selected from AAA7p1 (SEQ ID NO:13), AAA7p2 (SEQ ID NO:14), AAA7p3 (SEQ ID NO:15) and AAA7p1m (SEQ ID NO:16). –

Please replace the paragraph beginning at page 47, line 17, with the following rewritten paragraph:

– In a preferred embodiment, as outlined above, screens may be done on individual genes and gene products (proteins). That is, having identified a particular differentially expressed gene as important in a particular state, screening of modulators of either the expression of the gene or the gene product itself can be done. The gene products of differentially expressed genes are sometimes referred to herein as "angiogenesis proteins". In preferred embodiments the angiogenesis protein is as depicted in Figures 4, 8, 13, 18, and 22 (SEQ ID NOS:3, 7, 12, 18, and 20) or encoded by the sequences shown in figures 2, 3, 7, 12, 17, 21 and 23 (SEQ ID NOS:1, 2, 6, 11 17, 19, and 21). The

A 19 cont

angiogenesis protein may be a fragment, or alternatively, be the full length protein to a fragment shown herein. –

Please replace the paragraph beginning at page 47, line 27, with the following rewritten paragraph:

A 20

– In a preferred embodiment, the fragment is from AAA1. Preferably, the fragment includes a non-transmembrane region. In a preferred embodiment, the AAA1 fragment has an N-terminal Cys to aid in solubility. Preferably, the fragment is selected from AAA1p1 (SEQ ID NO:8) and AAA1p2 (SEQ ID NO:9). –

Please replace the paragraph beginning at page 48, line 1, with the following rewritten paragraph:

A 21

– In a preferred embodiment, the fragment is charged and from the c-terminus of AAA4. In one embodiment, the c-terminus of the fragment is kept as a free acid and the n-terminus is a free amine to aid in coupling, i.e., to cysteine. In one embodiment the fragment is an internal peptide overlapping hydrophilic stretch of AAA4. In a preferred embodiment, the termini is blocked. Preferably, the fragment of AAA4 is selected from AAA4p1 (SEQ ID NO:4) or AAA4p2 (SEQ ID NO:5). In another preferred embodiment, the fragment is a novel fragment from the N-terminal. In one embodiment, the fragment excludes sequence outside of the N-terminal, in another embodiment, the fragment includes at least a portion of the N-terminal. "N-terminal" is used interchangeably herein with "N-terminus" which is further described above. –

On page 183, immediately preceding the claims, please insert the enclosed text entitled "SEQUENCE LISTING".